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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,608	11/12/2003	Jorn Maeritz	10808/111	5868

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BRINKS HOFER GILSON & LIONE
INFINEON
PO BOX 10395
CHICAGO, IL 60610

EXAMINER	
WALLING, MEAGAN S	

ART UNIT	PAPER NUMBER
2863	

DATE MAILED: 07/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/706,608	MAERITZ, JORN	
	Examiner	Art Unit	
	Meagan S. Walling	2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *5/8/06*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 June 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *7/10/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

1. Claims 12 and 16 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

It is not statutory to claim a "computer program element", a computer program, or any part of a computer program. In order to make the claims statutory, a computer-readable medium that processes a computer program must be claimed. See MPEP 2106 and the USPTO Official Gazette Notices at http://www.uspto.gov/web/offices/com/sol/og/2005/week47/patgupa.htm

Claim Rejections - 35 USC § 103

2. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being anticipated by Whitefield et al. (US 6,512,985).

Regarding claim 1, Whitefield et al. teaches performing an analysis using values of at least one process parameter of a manufacturing process of a plurality of physical objects (column 1, lines 27-30); determining that at least one physical object of the plurality of physical objects does not satisfy a prescribed selection criterion (column 1, lines 45-49); marking the at least one physical object in such a way that the at least one marked physical object must be sent for a special measurement (column 1, lines 62-64); and removing the at least one marked physical object from the manufacturing process (column 1, lines 64-66).

Regarding claim 2, Whitefield et al. teaches that the physical object is a wafer (column 1, line 21).

Regarding claim 3, Whitefield et al. teaches that the analysis is a statistical analysis (column 1, lines 39-40).

Regarding claim 4, Whitefield et al. teaches that the values of the at least one process parameter are measured when the plurality of physical objects is being manufactured (column 1, lines 11-13).

Regarding claim 5, Whitefield et al. teaches sending the at least one marked physical object for a special measurement (column 1, lines 64-66).

Regarding claim 6, Whitefield et al. teaches that the special measurement is a measurement for checking the quality of the at least one marked physical object (column 1, lines 64-66).

Regarding claim 7, Whitefield et al. teaches continuing the manufacturing process for any of the plurality of physical objects not marked as failing the prescribed selection criterion (see Ref. 22).

Regarding claim 8, Whitefield et al. teaches that the selection criterion is a quality characteristic of the manufacturing process (column 1, lines 16-20).

Regarding claim 9, Whitefield et al. teaches that the selection criterion is not satisfied if a value of the at least one process parameter goes above or below a prescribed limit value (column 1, lines 50-55).

Regarding claim 10, Whitefield et al. teaches performing an analysis using values of at least one process parameter of the manufacturing process of the plurality of physical objects

(column 1, lines 27-30); marking at least one physical object when, as a result of the analysis, the at least one physical object does not satisfy a prescribed selection criterion (column 1, lines 62-64); removing the at least one marked physical object form the manufacturing process (column 1, lines 64-66); and sending the at least one marked physical object for special treatments (column 1, lines 64-66).

Regarding claim 11, Whitefield et al. teaches performing analysis using values of at least one process parameter of the manufacturing process of the plurality of physical objects (column 1, lines 27-30); marking at least one physical object when, as a result of the analysis, the at least one physical object does not satisfy a prescribed selection criterion (column 1, lines 62-64); removing the at least one marked physical object from the manufacturing process (column 1, lines 64-66); and sending the at least one marked physical object for special treatments (column 1, lines 64-66).

Regarding claim 12, Whitefield et al. teaches performing analysis using values of at least one process parameter of the manufacturing process of the plurality of physical objects (column 1, lines 27-30); marking at least one physical object when, as a result of the analysis, the at least one physical object does not satisfy a prescribed selection criterion (column 1, lines 62-64); removing the at least one marked physical object from the manufacturing process (column 1, lines 64-66); and sending the at least one marked physical object for special treatments (column 1, lines 64-66).

Whitefield et al. does not teach performing the process without human intervention.

It would have been obvious to one skilled in the art at the time of the invention to automate the method. Merely using a computer to automate a known process does not by itself

impart nonobviousness to the invention. See *In re Venner*, 262 F.2d 91, 95, 120 USPQ 193, 194 (CCPA 1958). See also *Dann v. Johnston*, 425 U.S. 219, 227-30, 189 USPQ 257, 261 (1976). See MPEP 2106.

3. Claims 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Whitefield et al. in view of Takanabe (US 6,606,574).

Regarding claim 13, Whitefield et al. teaches performing an analysis using values of at least one process parameter of a manufacturing process of a plurality of physical objects (column 1, lines 27-30); determining that at least one physical object of the plurality of physical objects does not satisfy a prescribed selection criterion (column 1, lines 45-49); marking the at least one physical object in such a way that the at least one marked physical object must be sent for a special measurement (column 1, lines 62-64); and removing the at least one marked physical object from the manufacturing process (column 1, lines 64-66).

Regarding claim 14, Whitefield et al. teaches performing an analysis using values of at least one process parameter of the manufacturing process of the plurality of physical objects (column 1, lines 27-30); marking at least one physical object when, as a result of the analysis, the at least one physical object does not satisfy a prescribed selection criterion (column 1, lines 62-64); removing the at least one marked physical object form the manufacturing process (column 1, lines 64-66); and sending the at least one marked physical object for special treatments (column 1, lines 64-66).

Regarding claim 15, Whitefield et al. teaches performing an analysis using values of at least one process parameter of the manufacturing process of the plurality of physical objects

(column 1, lines 27-30); marking at least one physical object when, as a result of the analysis, the at least one physical object does not satisfy a prescribed selection criterion (column 1, lines 62-64); removing the at least one marked physical object form the manufacturing process (column 1, lines 64-66); and sending the at least one marked physical object for special treatments (column 1, lines 64-66).

Regarding claim 16, Whitefield et al. teaches performing an analysis using values of at least one process parameter of the manufacturing process of the plurality of physical objects (column 1, lines 27-30); marking at least one physical object when, as a result of the analysis, the at least one physical object does not satisfy a prescribed selection criterion (column 1, lines 62-64); removing the at least one marked physical object form the manufacturing process (column 1, lines 64-66); and sending the at least one marked physical object for special treatments (column 1, lines 64-66).

Regarding claims 13-16, Whitefield et al. does not teach preventing values associated with the at least one marked physical object from affecting an average product quality of the plurality of physical objects.

Takanabe teaches performing quality control analysis early in production to take measures to assure that the average quality of a product does not fall below a limit (column 8, lines 9-20).

It would have been obvious to one skilled in the art at the time of the invention to combine the teachings of Whitefield et al. with the teachings of Takanabe to remove products that would affect the average product quality. The motivation for making this combination

would be to have a higher output by not declaring entire lots defective, but by removing defective wafers earlier (Takanabe, column 8, lines 1-20).

Response to Arguments

Applicant's arguments with respect to claims 14-16 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Meagan S. Walling whose telephone number is (571) 272-2283. The examiner can normally be reached on Monday through Friday 8:30 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571) 272-2269. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

msw

John Barlow
Supervisory Patent Examiner
Technology Center 2800